SUPREME COURT OF THE UNITED STATES.

No. 9, Original.—October Term, 1943.

The State of Kansas, Complainant,
vs.
The State of Missouri.
} Bill in Equity.

[May 8, 1944.]

Mr. Justice Rutledge delivered the opinion of the Court.

Kansas brings this original suit against Missouri to have determined their common boundary from the mouth of the Kaw or Kansas River northwardly, over a distance of approximately 128 miles, along the channel of the Missouri River to its intersection with Kansas' north boundary line.

At the time of Kansas' admission to the Union, January 29, 1861, the western boundary of Missouri followed the thread of the Missouri River, that is, the middle line of its main navigable channel, between these points.[1] This line then became the common boundary of the two states.[2] The bill of complaint was filed in 1940. It alleged that the thread of the stream had shifted frequently, sometimes suddenly, sometimes gradually, and that these changes had caused controversies concerning the true boundary. When the proceeding began it was in dispute at a number of places.[3] But during pendency of the suit the parties have settled all differences except one. This relates to the section of the boundary in the Forbes Bend region.[4]

[1] Cf. Missouri *v.* Kansas, 213 U. S. 78; Missouri *v.* Nebraska, 196 U. S. 23.

[2] Act of Admission of Kansas, 12 Stat. 126; Kansas Constitution of 1859, Charters and Constitutions of the United States, Part I, 629, 630.

[3] The complaint alleged disputes over the line at points along the river between War Department Survey Stations 399 and 405, at other points in Atchison County, Kansas, and at points along the river between War Department Survey Stations 510 and 515 (Forbes Bend).

[4] Attempts at settlement by negotiation had been authorized by Kansas before this proceeding was begun (Laws of Kansas, 1939, c. 355). Apparently they were unavailing, and this suit was instituted. After it was begun, however, the parties agreed to a settlement with respect to all areas but this one and incorporated it in this record. It will be made part of the decree.

After the filing of the suit a master was appointed. Extensive hearings were held. Both documentary and oral evidence was presented. The master has filed his report, which makes findings and conclusions in favor of Missouri. Kansas says these are contrary to the law and to the weight of the evidence.

The land in dispute consists of about 2000 acres. This now lies on the Missouri side of the river toward the lower end of Forbes Bend. Kansas claims this land was at one time soil accreted to the Kansas bank, which an avulsive change in the course of the main channel has put back on the Missouri side; or, in the alternative, that the tract formed as an island on the Kansas side of of the main channel and, as a result of a sudden shift in that channel to the other side of the island and the drying up of the old course, it has become physically attached to Missouri. In either event, Kansas urges, it follows that the boundary remains at the center of the river's former main channel. Missouri denies that the land accreted to Kansas, that there was avulsion, or that the island ever lay on the Kansas side of the main channel.

The states are not in dispute about the applicable law. They agree that when changes take place by the slow and gradual process of accretion the boundary moves with the shifting in the main channel's course.[5] Likewise, they agree that a sudden or avulsive change in that course does not move the boundary, but leaves it where the channel formerly had run.[6]

However, the parties are sharply at odds over the facts and the conclusions to be drawn from the evidence. In view of this and since we think the facts as presented by the evidence are conclusive of the controversy, it becomes necessary to sketch them and to refer to portions of the evidence in order to give an understanding of the issues and the basis for our conclusions.

I.

Forbes Bend lies between Doniphan County, Kansas, and Holt County, Missouri. The disputed boundary, according to the master's findings, extends along the main channel of the river as it now flows for a distance of about five miles bending southeasterly from Channel Mileage Station 515 to Station 510 (as measured

[5] Jefferis *v.* East Omaha Land Co., 134 U. S. 178; St Clair County *v.* Lovingston, 23 Wall. 46; Nebraska *v.* Iowa, 143 U. S. 359.

[6] Nebraska *v.* Iowa, 143 U. S. 359; Missouri *v.* Nebraska, 196 U. S. 23; Oklahoma *v.* Texas, 260 U. S. 606.

and marked in 1890). As the river enters Forbes Bend from the north it flows east of south. Near the point of entrance it is joined by Wolf Creek. This comes into the river from the Kansas side in an easterly direction. The mouth of Wolf Creek is roughly adjacent to Station 515. From this point the Kansas bluffs swing in a gradual convex curve southeasterly until they reach a point above Station 510. On the Missouri side the bluffs run, as they do on the Kansas side, generally southeasterly. Throughout the Forbes Bend region the distance as the crow flies from the Kansas bluffs to the Missouri bluffs is four miles more or less. Adjacent to and parallel with the Missouri bluffs, but between them and the river, lie tracks of the Burlington Railroad.

The Missouri River is a vagrant, turbulent stream. Its name reflects this character. The Big Muddy is said to carry more silt than any other river except the Yellow River in China. It is constantly changing its course within the region between its bluffs, shifting from side to side as natural forces work upon its flow. Expert testimony is that a change of conditions in one bend produces changes as great, or nearly so, in the next bend below.

The river flows around a big bend, known as Wolf Creek Bend, just before it reaches the mouth of Wolf Creek. Here it runs almost due south. It is conceded by all that in 1900 the river flowed southeasterly in a single channel from the mouth of Wolf Creek, hugging the Kansas bluffs throughout the entire course of flow to Station 510. As it presently flows, the river makes a wide arc, first to the left or Missouri bank in a course almost due east or north of east, before it turns sharply to the south again at a point midway between the bluffs, and follows this southerly course until it strikes the old main channel at the Kansas bluffs above Station 510. This bend now is in the form of a bow, with the river proper forming the bow and the old channel along the Kansas bank its string. Roughly, therefore, the difference between the present flow through Forbes Bend and the flow in 1900 is the difference between the bow and the string. At the center of the bow the distance between the old channel and the present one appears to be at most one mile.

However, as will appear, the channel's present location results from more complex changes than merely a movement of the river north and east over the distance lying between these two channels. According to the greatly preponderant though not undis-

puted evidence, there was a division of channels in Forbes Bend from about 1914 or 1917 to 1927 or 1928. During this time the more westerly or Kansas channel lay slightly west of where the present channel runs. The Missouri or easterly channel lay on the other side of the area in dispute, which then formed part of a bar or island. At one time, probably about 1922 or 1923, during the period of greatest erosion of the Missouri bank, this channel came within half a mile or less of the Burlington tracks. The Missouri channel, with the river above it, then followed a course almost due east or slightly north of east from below the mouth of Wolf Creek to the point of its closest approach to the railroad. Then it swung sharply to the south and in a curving line came back to join the original channel near the Kansas bluffs above Station 510.

From the recital thus far it is clear that in 1900 the land which then lay where the disputed tract now lies was Missouri land. This is undisputed. Likewise, the tract now is attached to Missouri on the easterly bank of the river. This is because the Missouri channel dried up during some five to eight years beginning around 1927 or earlier. But, before that process began, for many years the land in question lay between the two channels. And it is from conflicting views concerning whether, how and when these major changes took place the parties derive their respective claims to sovereignty over this soil.

Kansas first claims that the land in dispute became hers by accretion. Her principal theory is that beginning in 1900 and during a period extending to 1917 or to 1927 the river channel, due to changes upstream, gradually moved out from the Kansas bluffs over a distance of some three to three and a half miles to the north and east.[7] As Missouri soil thus was being cut away, it is said the land in question was built up gradually on the Kansas side. In any event, if it was not connected firmly to the Kansas shore it was separated only by narrow and irregular chutes and sloughs, not by any sort of regular channel. Then either in 1917[8]

[7] Since Kansas claims avulsive change both in 1917 and in 1927, and that the accretion began about 1900 or shortly thereafter, her claim necessarily implies that the period of accretion extended either from 1900 to 1917 or from 1900 to 1927.

[8] At that time, according to this claim, the main channel of the river flowed through the so-called Missouri channel to the north and east, but was suddenly changed by the ice jam back from that channel into a chute on the Kansas side. This chute previously had cut across the allegedly accreted land a little

or in 1927[9] ice jams forming in the river caused it suddenly to leave its channel near the Missouri bluffs and to open a new one near where the present channel runs. Relying upon accretion from 1900 to 1917 or 1927 for acquisition of the disputed area, Kansas relies upon avulsion in 1917 or 1927 to prevent losing the area again to Missouri. Her alternative theory of island formation is relied on in case that of accretion and avulsion fails on the proof. By this, the island formed on her side of the main channel and the subsequent shift of the main flow to the Kansas channel and drying up of the Missouri channel did not affect her jurisdiction.

Missouri meets all of Kansas' claims with denial on the facts. She says first that the land in question has been at no time accreted soil of Kansas. On the contrary, she claims that the disputed area formed as an island in the river bed beginning about 1910 or 1912, and from then until 1927 or 1928 there was a divided flow around this island, a Missouri channel running north and east of it with a Kansas channel to the south and west. She insists that the Kansas channel always remained the main channel of the stream and only a minor one reached proximity to the railroad tracks. Accordingly, she says the island formed as Missouri land and always remained Missouri territory. Missouri thus opposes her view of island formation, both to Kansas' view of that process and to her claim of accretion and avulsion.

However, Missouri adds a further argument even if the Kansas theory of accretion is conceded. According to this, the effect of the accretion to the Kansas bank is counteracted by the fact that at no time was there an avulsive change, whether in 1917 or in 1927. On the contrary the river moved back gradually as it came. In this view the accretive process working against Missouri ended in 1923 or 1924, when the Missouri channel reached greatest proximity to the railroad tracks. Beginning in those years and continuing gradually until 1933 or 1934, the river moved slowly back to a point beyond the location of the present channel. Thus purporting to follow the accretion theory in both directions, Missouri claims the land in question.

---

to the west of where the present channel now lies. The complaint alleges that the ice jam occurred "on or about February 1918." The scanty testimony in the record if completely accepted would establish the ice jam in 1917 rather than in 1918; cf. note 24 *infra*.

[9] The complaint alleges that the ice jam occurred "during the year 1927." The witnesses who testify to the jam at this time date it variously in 1927, 1928 and 1929; cf. note 25 *infra*.

It may be noted that crucial to Kansas' case, whether on her theory of accretion and avulsion or on that of island formation, is the need for showing that the main channel followed the course of the Missouri channel.

II.

Roughly the history of the Bend, for our purposes, may be divided into three periods, namely, from 1900 to 1917; from 1917 to 1928; and from 1928 to 1940, when this suit was begun. There is documentary evidence as well as oral testimony for the period prior to 1900. There is little or no documentary evidence in the form of maps, photographs, drawings or other materials from 1900 to 1923. There is a considerable amount of documentary material from 1923 on.

Perhaps the most important documentary item is a map of the Forbes Bend region compiled from the field in 1923 by the United States Engineer Office at Kansas City, designated as complainant's Exhibit 46 in this record. Another map of considerable assistance, with information penciled on it by two witnesses who testified at the hearings, is complainant's Exhibit 47. This purports to show in less detail than Exhibit 46 conditions in the Bend in 1926. The witnesses' penciled additions, placing channels and other landmarks, with their testimony, give considerable information about conditions in the Bend from 1921 or 1922 on to 1926 and later. Assistance also is derived from complainant's Exhibit 56. This is an aerial survey photograph of the Forbes Bend region made in 1941, showing conditions when this suit was begun. Reference to these exhibits will be made as the testimony of some of the witnesses is referred to.

It is clearly established that sometime around 1900, fixed by some older witnesses variously as beginning earlier and by others later, the river began a northerly and eastward movement, cutting away the Missouri bank and filling in on the Kansas bank.[10] Neighborhood testimony attributes the beginning of this movement to some change in conditions upstream, taking place apparently around the mouth of Wolf Creek or in Wolf Creek Bend above.[11] Whatever this change may have been, it apparently threw the current of the stream against the solid rock formation

[10] C. McWilliams (1892); P. Dyer (1898); C. Hudgins (1900); J. H. Simpson (1904); J. E. Simpson (1905).

[11] *Cf.* testimony of L. F. Staleup.

on what is known as Lookout Mountain. This is a point on the Kansas bluffs about a mile or a mile and a half below the mouth of Wolf Creek. The current, striking this rock with force, was thrown over to the north or Missouri bank.

The soil composition of the north bank is a common formation in the Missouri River valley. Underneath the surface soil is sand or quicksand. This is covered by a layer of gumbo soil. Testimony in the record discloses there is no great erosion when the water is very high or very low. But when it is at an intermediate stage the water comes in contact with the underlying sand, washes it out, and the topsoil falls into the river in great chunks, often twenty feet long by ten feet wide. As the current was forced from the Kansas rock to the Missouri sand, it undercut more and more of the Missouri soil. Evidence in the record also shows that between 1900 and 1920, or a little later, from 4000 to 5000 acres of Missouri soil was washed into the river by this process. On this stood houses, barns, a school building known as the Baker schoolhouse, and other structures, which either went into the river as the soil was undermined or were moved to prevent their falling in. The Baker schoolhouse, which in 1900 was a mile or more northeast from the river bank, was moved about 1915 to prevent its going into the river.[12] By that time the erosion was moving at great speed and this continued until the farthest point was reached, a half mile or less from the Burlington railroad, about 1923 to 1925.[13]

The clear weight of the evidence is that there was only a single channel of the river until about 1912 or 1914. Witnesses for both Kansas and Missouri substantiate this.[14] The evidence also clearly

[12] Witnesses vary as to the exact time from 1910-11 to 1916 (J. H. Peret: 1910-12; Mrs. S. Jenkins: 1910-12; R. E. Simpson: 1913; C. McWilliams: 1912-13; C. Harper: 1915; C. Hudgins: 1915; B. Hudgins: 1916; E. McCoy: 1915). But most of them put this event in 1912 or later, and the most reliable testimony, by those who moved the building (C. Hudgins and B. Hudgins), places it in 1915 or 1916.

[13] C. McWilliams (1924-25); E. McCoy (1922); A. H. Murray (1922-23); Ralph Dyer (1923-24); W. Metcalf (1917); cf. E. A. Cole (1923, 1928).

[14] Varying dates are given for the time at which a divided flow was first noted.

Kansas witnesses: I. Muse: 1900; L. F. Stalcup: 1910-1911; J. E. Simpson: 1912-13, 1917; O. McKay: 1917; R. E. Simpson: 1918; C. Baskins: 1917; C. W. Ryan: 1917 or 1919; J. McKay: 1920.

Missouri witnesses: D. Barbour: 1903; B. Hudgins: 1914; C. Harrison: 1914; Ralph Dyer: 1913-14; C. Harper: 1915; A. H. Murray: 1915; H. H. Hall: 1916; W. Metcalf: 1916; J. Fitzgerald: 1917; Raymond Dyer: 1917-1918.

establishes that there was a divided flow from 1917 or earlier to 1927. This too is substantiated by both Kansas and Missouri witnesses.[15] The evidence, however, is conflicting concerning when the division first took place and whether, while it remained, the Kansas channel or the Missouri channel was the main one.

Witnesses for Missouri, and some for Kansas, testify that the division occurred before 1917 and that the two channels remained substantially equal or the Kansas channel was the larger in the volume of water carried between the time of the division and sometime between 1922 and 1927 or 1928.[16] The Missouri witnesses fairly uniformly agree that the flow in the two channels was at least "fifty-fifty" and some of them say the Kansas channel always carried the heavier volume of water.[17] They also generally agree that the Missouri channel began to decrease and the Kansas channel to increase in volume at some time before 1927. Some place the beginning of this process as early as 1921 or 1922.[18] The evidence is substantial that the decrease in the Missouri flow and the increase in the Kansas flow began before 1927 and it is almost unanimous that from 1928 on the Missouri channel contained no current or only the flow of Mill Creek Drainage Ditch, which by that time had been diverted into the Missouri channel. Witnesses for Missouri attribute a substantial portion of the filling up of the Missouri channel to deposits made by the Mill Creek Ditch.[19] They agree, and the evidence for Kansas hardly contra-

[15] See note 14 *supra*. A few Kansas witnesses maintain there was only one channel through this period.

[16] See note 14 *supra*. Kansas' witnesses testified variously that there always had been a channel on the Kansas side, that it was swifter than the Missouri channel (J. H. Simpson), that the Kansas channel was the "main river" (Mrs. J. Coufal), that the Kansas channel was much the larger in 1918 (R. E. Simpson), that most of the water was on the Kansas side in 1920 (P. Bottiger); cf. C. B. Caton, that the river was just about evenly divided in 1917 (C. Baskins). Missouri witnesses said that there was always a substantial flow in the Kansas channel and that it was about as large as or larger than the Missouri channel (e. g., Ralph Dyer, B. Hudgins, C. Dinwiddie, J. Fitzgerald, C. Harper, Raymond Dyer). They placed boats in the Kansas rather than the Missouri channel (E. McCoy); in 1918 (W. L. Moore); 1916 to 1929 (H. H. Hall); and in 1927 (C. Hudgins).

[17] See note 16 *supra*.

[18] W. Metcalf: 1917; W. L. Moore: 1918; C. Dinwiddie: 1920-22; C. Harrison: 1921; J. Fitzgerald: 1923-1925; cf. P. Bottiger: 1920.

[19] J. Fitzgerald, E. Wales, J. H. Peret (Kansas witness); cf. E. McCoy C. Harper.

dicts this,[20] that between 1928 and 1934 the Missouri channel almost completely dried up. The great preponderance of the evidence as a whole is that this occurred gradually over a period of years, varying according to different witnesses from two or three to eight or ten years.

On the other hand, Kansas witnesses are not in accord among themselves as to what occurred in the Bend between 1912 and 1928. Some of them say there was a divided flow.[21] Others deny this but qualify their denials by asserting that, although the main channel of the river ran over into Missouri close to the Burlington tracks until 1927, there were chutes on the island and particularly there was one chute running from about the mouth of Mill Creek Ditch as it was in 1917 (directly across northerly from the northern end of the bar or island) due south to the Kansas bluffs at about Station 510.[22] However, they maintain generally that this was a small chute, or smaller than the Missouri channel, at any rate up to 1922 or 1923. A few say it was small until 1927, when the alleged ice jam occurred.[23]

Some witnesses for Kansas maintain that there were big ice jams in 1917[24] and in 1927.[25] Different witnesses testify to the two alleged jams. Those who say one occurred in 1917 assert that it threw the main flow back from the Missouri channel into the Kansas channel. Likewise some of those who say there was a jam in 1927 accredit the same consequence to that jam. The two Kansas theories of avulsion therefore are entirely inconsistent, though each is supported by some evidence. If there was avulsion in 1917, there hardly could have been avulsion, on this record, in 1927. On the

[20] E. g., J. H. Gray: 1928 *et seq.*; A. F. Hays: 1926 *et seq.*; J. B. Gray: 1927-30; G. Atkinson: 1929-after 1934; J. H. Peret: 1929-33; C. Coufal: 1929-33; C. W. Ryan: 1928-31; some Kansas witnesses claim the drying up of the Missouri channel was a sudden concomitant of an ice jam in 1929 but add that the Missouri channel contained water until 1933 or 1934 (e. g., C. Coufal, E. A. Cole), or 1935 or 1936 when it dried up as a result of government diking and revetment work upstream (e. g., J. Coufal).

[21] See note 14 *supra.*

[22] E. g., A. F. Hays, C. Coufal, K. Brownlee, K. Robinson.

[23] E. A. Cole, J. Coufal. Cole is a Kansas claimant to ownership of part of the disputed land. Coufal once worked for him.

[24] C. Baskins: 1917; J. E. Simpson: 1917; P. Dyer: 1917; C. Dyer.

[25] E. A. Cole: 1929; C. Coufal: 1929; J. Coufal: 1929; Mrs. J. Coufal: 1929; E. L. Rockwell: 1927; I. Overstreet: 1927; H. W. Linville: 1927; P. Dyer: 1927 or 1928. Mrs. Coufal, however, testified the "main river" was on the Kansas side of the island at that time. In this respect her testimony flatly contradicts that of her husband and Cole.

other hand, several Kansas witnesses, familiar with the territory during one or both of the two years in question, testify they saw no ice jams in those years.[26] Others say they saw ice but not in large or unusually large quantities or with unusual effects on the flow of the river.[27] Nearly all of the Missouri witnesses deny that there were ice jams either in those years or at other times, although some refer to ice in the river as not uncommon in winter or early spring. The Missouri witnesses are fairly unanimous in saying that at no time had ice conditions or others caused a sudden change in the river's course[28] and in this they are supported by a number of Kansas witnesses.[29]

When we turn to complainant's Exhibit 46 we find very substantial support for Missouri's view that during the controverted period the flow of the river was divided and that the Kansas channel equalled or exceeded the Missouri channel in the flow or volume of water carried. This map, compiled by the Corps of Engineers of the United States Army, who had charge of the river's development, shows conditions in 1923. Two channels appear, with a large sand bar or island between them. The map places the Missouri channel within less than a half mile of the Burlington tracks. It shows a width of about 1250 feet at the narrowest point. Soundings, read from the south end of the island around the curve to its north end, disclose that the deepest water ran from point to point as follows: 15 feet, 16 feet, 25 feet, 13 feet, 14 feet. On the westerly side of the island the Kansas channel was a little wider at its narrowest point. Its soundings from south to north at appropriate intervals were 31 feet, 12 feet, 12 feet and 13 feet. The Missouri channel meandered from the south to the east and north and then back around the north end of the island or bar in a due westerly direction. On the other hand, the Kansas channel was much shorter, running straight north from the south end of the island along its western shore to its northern end. The map shows that the higher portion of the island was covered with willows and a small part at the lower end was under cultivation. Furthermore,

[26] D. Baskins, J. Kotsch, R. E. Simpson, J. H. Simpson, W. Prusman, G. Atkinson.

[27] I. Muse, L. F. Stalcup; cf. A. P. Staver.

[28] C. Hudgins, V. Harrison, C. Dinwiddie, R. L. Greene, W. Metcalf, E. Wales; cf. E. McCoy, H. H. Hall, D. Barbour.

[29] Cf. note 20 *supra*; J. Kotsch, W. Prusman, C. McWilliams.

it is significant that at the north end of the island, just opposite the mouth of Mill Creek Ditch, the water in the Missouri channel was comparatively shallow.

Exhibit 46 furnishes the most reliable evidence in the record of conditions in Forbes Bend at a given time. If only this exhibit and the facts it discloses were considered, clearly it could not be ruled that the main navigable channel of the river was the Missouri channel. For purposes of navigation, the Kansas channel was much the shorter and more direct and, from the soundings as well as the shorter flow, it apparently carried at least an equal volume of water.

Exhibit 47, which is described as a revision from airplane photographs, shows in general a somewhat similar though less detailed picture for 1926. However, two witnesses for Kansas, Kenneth Robinson and Joseph H. Gray, who hunted in the region from 1920 to 1927 or 1928, testified concerning this exhibit and marked on it in penciled lines their recollections of the channels' respective courses in 1922. Their testimony gives perhaps the strongest support to Kansas' case that the main channel during a portion of the disputed period was on the Missouri side. But, apart from its inconsistency as to the location and direction of the Kansas chute,[30] it does not accord with the more reliable evidence given concerning conditions in the Bend at the same time by complainant's Exhibit 46 and it is contradicted by numerous witnesses for Missouri as well as by some for Kansas in allocating a larger flow to the Missouri channel. It cannot therefore be accepted as controlling.

III.

The evidence need not be stated in further detail. In our opinion it fully supports the master's ultimate findings and conclusions.

[30] They agreed that the Missouri channel flowed around the island not far from the Burlington tracks, turning south at that point and flowing against the Kansas bluffs at Station 510. They also agreed that the Kansas channel was a chute. But they differed concerning its direction and location. Robinson placed it as running almost due south across the center of the island in a straight course. Gray placed the Kansas chute more to the west and with a curving course. Both testified that the Missouri channel was the main channel at that time. The inconsistency between Exhibit 46 and the testimony and drawings of Robinson and Gray may be accounted for in part, though not altogether, by the fact they were in the Bend for hunting and fishing purposes, chiefly in the fall, whereas Exhibit 46 was made from surveys in June and July. The difference in time, however, is hardly enough to account for the difference either in width or depth of the Kansas channel as shown by the exhibit and by their testimony.

It was his view, first, that there was no avulsive change, whether in 1917, 1927, or at any time. He found there was some evidence of an ice jam in 1917 and more to substantiate such a claim for 1927. But he also found, and the evidence, though not undisputed, fully substantiates his conclusion that neither of these jams was sufficient to cause a sudden change in the river's course.

There is very considerable doubt, on the record as a whole, whether the alleged jam in 1917 occurred at all. In any event, the preponderant evidence is that it amounted to little, if anything, more than the normal piling of ice on the heads of bars and islands during the spring breakup.[31] There is evidence that this occurred each year. The proof therefore to sustain avulsion in 1917 is not sufficient and this phase of the case may be put aside.

We agree with the master that the evidence to show a more unusual piling up of ice at the head of the island in 1927 is somewhat stronger.[32] But we also agree with him that the evidence as a whole is clearly preponderating that this did not cause an avulsive change. As has been stated, there is some evidence that the alleged 1927 jam caused the main channel of the river to shift then and suddenly from the Missouri channel to the Kansas channel as the latter flowed from 1927 or 1928 until the government's revetment work on the river forced the channel to its present location after 1935. But this is not enough to sustain Kansas' case.

Both by virtue of her position as complainant and on the facts, Kansas has the burden of proof in this case. Cf. *Oklahoma* v. *Texas*, 260 U. S. 606. The disputed location was in Missouri in 1909. It lies on the Missouri side now and has done so, by practically all the evidence, since at least 1927 or 1928. These facts put upon Kansas the burden of showing that in the meantime the land lay on the Kansas side of the main channel by virtue of natural changes which were effective to change the jurisdiction. Kansas has shown beyond doubt that one branch of the river eroded to a point or points north and east of this land, probably as early as 1929, possibly earlier. But beyond this fact, whether on her theory of accretion and avulsion or on that of island formation, the weight of the evidence is against her view of what occurred.

Kansas' main difficulty perhaps is that by attempting to prove one theory of what happened in Forbes Bend she divides the

[31] Cf. notes 17-20 *supra*.

[32] Cf. note 10 *supra*.

weight of her evidence and thus goes far to disprove her other theory. To show accretion and avulsion she was required to prove that the river's main channel moved gradually from the Kansas bluffs in 1900 to the farthest erosion point in Missouri in 1927, and then suddenly shifted back to a new channel cut then through the middle of the accreted soil, leaving the old one from that time on a minor or dry one. To show sovereignty by island formation it was necessary to prove that the island formed on the Kansas side of the main channel, in which event a subsequent shift in the main flow to the other side of the island would not affect her jurisdiction,[33] although Missouri's alternative contention seems to be to the contrary.[34] By proving the formation of the island, Kansas in effect disproves that the disputed area became accreted soil attached firmly to the Kansas bank. Her own evidence in this respect, added to that given by Missouri, far outweighs the evidence she presented to show accretion beyond where the present channel lies and creates an overwhelming preponderance that the flow was divided from 1912 or at any rate 1917 to 1927 or 1928; that the island formed in this period; and thus that the soil in question was not at any time attached firmly to the Kansas bank by accretion. If it was formed as island soil, it was not accreted soil.

Kansas' evidence concerning the division of flow and formation of the island, together with that concerning the drying up of the Missouri channel, also proves not that the river suddenly cut a new channel through accreted soil in 1927, but that it merely shifted the volume of flow from one channel to another preexisting one. In other words it goes to disprove both accretion and avulsion. Missouri and Kansas witnesses are agreed that the main flow was in the Kansas channel from 1927 on and there is substantial agreement that by 1933 or 1935 the Missouri channel had dried up, except for the flow of Mill Creek Ditch, and largely had filled up by deposits from that stream and other forces. Missouri witnesses say this drying up began before 1927, some as early as 1922

[33] Missouri v. Kentucky, 11 Wall. 395; Davis v. Anderson-Tully Co., 262 Fed. 681 (C. C. A.); Commissioners v. United States, 270 Fed. 110 (C. C. A.).

[34] Missouri apparently urges that even if the land formed as an island in the Kansas side, the process by which the main channel shifted from the eastern to the western channel and the former gradually filled with alluvial deposits thus connecting the island to the Missouri shore, entitles it to sovereignty over the disputed lands.

or 1923, and therefore continued for ten or twelve years. Kansas witnesses generally say it began in 1927 and continued for from three to seven or eight years. Only a few of them say the ice jam that year cut a new channel. More testify that the main flow then shifted from one channel to the other, and some join the witnesses for Missouri in saying that this shift began earlier. Except for the few witnesses who testify to the sudden cutting of a new channel, the great weight of the testimony is that whatever change occurred in reduction of the flow in the Missouri channel required several years to complete. It was a gradual process, and therefore not the sudden shift necessary to show avulsion. We need not decide what the effect would be if the evidence had shown this was a gradual cutting of a new channel. It was at most a gradual shifting from one to another. Kansas clearly has failed to prove that there was a single channel of the river which gradually moved over to the farthest erosion point, meanwhile accreting this land to her soil, then suddenly moved back, either in 1917 or in 1927, to a new channel cut through the accreted soil. Only by accepting the evidence given by the few witnesses who supported this theory, which was contradicted both by the weight of her own evidence concerning island formation and by substantially all that was offered for Missouri, could a finding in Kansas' favor be made under the theory of accretion and avulsion.

Kansas' stronger case upon the proof is on the theory of island formation. On this, as under that of accretion and avulsion, it was necessary for her to show that the Missouri channel was the river's main channel and thus the island, which is now part of the disputed land, was formed on her side of the river's thread. On this crucial issue Kansas' case is stronger perhaps than in any other respect. She presented substantial evidence to show that while the river was divided or during some part of that period, more especially from 1921 or 1922 to 1927, the Missouri channel was the main one, both in volume of water carried and, less clearly, in availability for navigation. There is, however, at least an equal weight of evidence, given both by Missouri witnesses and by some for Kansas, that the Kansas channel remained the main navigable channel throughout the period of division.

The evidence on this controlling issue unfortunately is not as free from conflict or doubt as we might wish. But it cannot be said, when account is taken of all the evidence, both oral and docu-

mentary, that a preponderance sustains Kansas' view that the main channel ever changed to the Missouri side. Kansas' burden required preponderant proof. She has not made it.

As the case has been made, both the master and this Court have had to rely upon the inadequate and inconclusive documentary evidence and the conflicting and often vague recollections of neighborhood witnesses. The sum does not add up to the weight of proof Kansas was required to establish in order to prevail. The master saw and heard the witnesses. His conclusions in all respects were in favor of Missouri. We find no basis in the record for any conclusion that he performed his task with other than fair, disinterested, painstaking effort and attitude. His judgment accords with the conclusions we make from our own independent examination of the record. It is not necessary for us to decide more than that Kansas has failed to show that the main channel of the river shifted at any time in question from a course such as the river now follows, or one slightly closer to the Kansas bluffs, to one following the course of the Missouri channel when the flow was divided.

It follows the land in dispute must be awarded to Missouri and the boundary will be fixed as the master has recommended in his report. A decree will be entered accordingly.

A true copy.

Test:

Clerk, Supreme Court, U. S.

SUPREME COURT OF THE UNITED STATES.

No. 9, Original.—October Term, 1943.

The State of Kansas, Complainant,
vs.
The State of Missouri.

DECREE.

[June 5, 1944.]

This cause having been submitted upon the pleadings, evidence and exhibits, after arguments by counsel, and upon the Master's Report, and the Court having duly considered same and being sufficiently advised,

It Is Ordered, Adjudged and Decreed that the boundary line between the States of Kansas and Missouri, which extends from the intersection of the Missouri River with the 40th parallel, north latitude, southward to the middle of the mouth of the Kaw or Kansas River, be and it is hereby established as the middle line of the main navigable channel of said Missouri River as said river flowed at the time of the filing of Complainant's Bill of Complaint herein, throughout the entire course of said river from its intersection with the 40th parallel, north latitude, southward to the middle of the mouth of the Kaw or Kansas River, with the exception of such deviations and departures from the course of said Missouri River, as it then flowed, as are covered by and provided for in the written stipulations between the parties and are incorporated in the description of said entire boundary hereinafter set forth.

The boundary line hereinbefore mentioned and hereby established is more particularly described as follows, to-wit:

Beginning with the fortieth parallel of north latitude, the same being the boundary between the State of Kansas and the State of Nebraska, (at its intersection with the Missouri River) thence down the course or channel of the said Missouri River to a place therein opposite which the left bank thereof is a point 15.50 chains West and 9.75 chains South of the Northwest corner of Section Fourteen, Township One-South, Range Nineteen-East, Doniphan County, Kansas.

Thence departing upon and from the left bank (at a point 15.50 chains south of the Northwest Corner of Section Fourteen,

Township One-South, Range Nineteen-East, Doniphan County, Kansas) of the present course or channel of the said Missouri River and running North forty degrees thirty-three minutes east for a distance of 34.33 chains.

Thence North 73 degrees 0 minutes East for a distance of 20.89 chains,

Thence North 72 degrees 30 minutes East for a distance of 21.30 chains,

Thence North 73 degrees 40 minutes East for a distance of 5.22 chains, (the same being a point 14.44 chains South of the Southwest corner of Section 26, Township Sixty North, Range Thirty-Nine West, Holt County, Missouri).

Thence North 73 degrees 40 minutes East for a distance of 8.59 chains,

Thence North 74 degrees 45 minutes East for a distance of 10.01 chains,

Thence North 72 degrees 15 minutes East for a distance of 12.09 chains,

Thence North 77 degrees 0 minutes East for a distance of 1.32 chains, (the same being a point 36:24 chains North of the Northwest corner of Section Thirteen, Township One-South, Range Nineteen-East, Doniphan County, Kansas),

Thence North 73 degrees 45 minutes East for a distance of 6.99 chains, (the same being a point 3.57 chains South of the quarter section corner on the South side of Section Twenty-Six, Township Sixty North, Range Thirty-Nine West, Holt County, Missouri),

Thence North 73 degrees 45 minutes East for a distance of 33.35 chains, (the same being a point 7.75 chains North of the center of Section Twelve, Township One South, Range Nineteen East, Doniphan County, Kansas),

Thence South 85 degrees 0 minutes East for a distance of 40.20 chains,

Thence South 83 degrees 30 minutes East for a distance of 8.00 chains, (the same being a point 38.66 chains South of the center of Section Twenty-Five, Township Sixty North, Range Thirty-Nine West, Holt County, Missouri),

Thence South 83 degrees 30 minutes East for a distance of 4.95 chains,

Thence South 82 degrees 45 minutes East for a distance of 11.01 chains,

Thence South 80 degrees 30 minutes East for a distance of 9.91 chains,
Thence South 80 degrees 0 minutes East for a distance of 8.95 chains,
Thence South 46 degrees 0 minutes East for a distance of 8.67 chains,
Thence South 42 degrees 30 minutes East for a distance of 10.45 chains,
Thence South 38 degrees 0 minutes East for a distance of 10.98 chains,
Thence South 40 degrees 30 minutes East for a distance of 9.99 chains,
Thence South 38 degrees 0 minutes East for a distance of 9.89 chains,

(The same being to the center of the road),

Thence South 18 degrees 0 minutes East for a distance of 12.57 chains,
Thence South 14 degrees 26 minutes East for a distance of 13.72 chains,
Thence South 8 degrees 30 minutes West for a distance of 11.74 chains,

(the same being a point 40.52 chains West of the Southeast corner of Section Thirty-One, Township Sixty North, Range Thirty-Eight West, Holt County, Missouri),

Thence South 8 degrees 30 minutes West for a distance of 5.60 chains,
Thence South 12 degrees 30 minutes West for a distance of 12.22 chains,
Thence South 19 degrees 30 minutes West for a distance of 8.98 chains,
Thence South 25 degrees 0 minutes West for a distance of 15.50 chains,

(the same being a point 52.98 chains West and 1.24 chains South of the east quarter corner of Section Six, Township Fifty-Nine North, Range Thirty-Eight West, Holt County, Missouri, which point also is 68.80 chains East of and 0.47 chains South of the corner to Sections Thirteen (13), Eighteen (18), Nineteen (19),

Twenty-Four (24) in Township One South, Ranges Nineteen and Twenty East, Doniphan County, Kansas),

Thence South 36 degrees 45 minutes West for a distance of 21.00 chains,

Thence South 28 degrees 30 minutes West for a distance of 18.50 chains,

Thence South 38 degrees 15 minutes West (for a distance of 36.30 chains) to the left bank of the Missouri River, at which latter point the said boundary returns to the left bank of the present course or channel of the said Missouri River and from there down the course or channel of the said Missouri River to the place therein where the said Missouri River intersects the West line of Section Twenty-Eight, Township Fifty-Nine North, Range Thirty-Eight West, Holt County, Missouri.

Thence from the place where the Missouri River intersects the West line of Section Twenty-Eight, Township Fifty-Nine North, Range Thirty-Eight West, Holt County, Missouri, on down the course or channel of the said Missouri River, and with the middle line of the main navigable channel of said Missouri River as the same flowed on the 27th day of May, 1940, through the section of said river known as Forbes Bend, in a general easterly and southeasterly direction downstream to the lower end of Forbes Bend to a point in the present course or channel of said Missouri River opposite which the left bank of said river intersects the North and South center section line of Section One, Township Fifty-Eight North, Range Thirty-Eight West, in Holt County, Missouri, and then beginning at said point in the present course or channel of the said Missouri River opposite which point the left bank of the said Missouri River intersects the North and South center section line of Section One, Township Fifty-Eight North, Range Thirty-Eight West, in Holt County, Missouri, and thence proceeding down the course or channel of the said Missouri River to the place therein opposite which the left bank of said Missouri River is a point 2216 feet West and 2096 feet South of the Northeast corner of the Northwest quarter Section Twenty-Two, Township Two South, Range Twenty-One East in Doniphan County, Kansas.

Thence departing upon and from the left bank (at a point 2216 feet West and 2096 feet South of the Northeast corner of the Northwest quarter of Section Twenty-Two, Township Two South,

Range Twenty-One East in Doniphan County, Kansas) of the present course or channel of the said Missouri River and running thence North 19 degrees 13 minutes East, 2200 feet,

Thence North 46 degrees 30 minutes East, 4312 feet,

Thence North 29 degrees 40 minutes East, 5104 feet,

Thence North 35 degrees 45 minutes East, 3432 feet,

Thence North 44 degrees 10 minutes East, 660 feet to a point 1298 feet West of the Northwest corner of Section Twelve, Township Two South, Range Twenty-One East in Doniphan County, Kansas,

Thence in a Northeasterly direction for a distance of 1868 feet to a point on the West line of Section One, Township Two South, Range Twenty-One East in Doniphan County, Kansas, which latter point on said West line of said Section One is 1350 feet North of the Southwest corner of said Section One,

Thence North 60 degrees 00 minutes East, 1188 feet,

Thence North 66 degrees 25 minutes East, 1960 feet to a point 820 feet South of the Southwest corner of Section Twenty-Four, Township Fifty-Nine North, Range Thirty-Seven West in Holt County, Missouri,

Thence North 84 degrees 05 minutes East 2618 feet to a point 534.6 feet South of the South quarter corner of Section Twenty-Four, Township Fifty-Nine North, Range Thirty-Seven West in Holt County, Missouri,

Thence South 78 degrees 00 minutes East, 2409 feet,

Thence South 60 degrees 00 minutes East, 2323 feet,

Thence South 43 degrees 30 minutes East, 2748 feet to the left bank of the Missouri River (the same being a point 561 feet upstream from U. S. River Marker numbered 482) at which latter point the said boundary returns upon the left bank of the said Missouri River to the present course or channel of the said Missouri River,

Thence down the course or channel of the said Missouri River to the place therein opposite which the right bank thereof intersects the south line of Section Ten, Township Five South, Range Twenty-One East in Doniphan County, Kansas,

Thence departing upon and from the right bank of said Missouri River and running thence West upon the South line of said Section Ten, Township Five South, Range Twenty-One East in

Doniphan County, Kansas, to the Southwest corner of said Section Ten,
Thence North on the West line of said Section Ten for a distance of 1322 feet,
Thence North 18 degrees 25 minutes West, 1122 feet,
Thence North 61 degrees 53 minutes West, 793 feet,
Thence South 88 degrees 21 minutes West 3434 feet to the West line of Ogden land,
Thence South 89 degrees 40 minutes West, 1783 feet on the South line of the Koch land,
Thence South 10 degrees 03 minutes West, 309 feet,
Thence South 43 degrees 36 minutes East, 196 feet (along center of road),
Thence South 24 degrees 30 minutes West, 504 feet,
Thence South 27 degrees 00 minutes West, 282 feet (to top of levee)
Thence South 32 degrees 30 minutes West, 360 feet (across ditch)
Thence South 35 degrees 34 minutes West, 245 feet,
Thence South 34 degrees 18 minutes West, 809 feet,
Thence South 30 degrees 25 minutes West, 132 feet,
Thence South 14 degrees 13 minutes West, 1254 feet, to a point (marked by an old fence corner post) on the North line of Atchison County, Kansas, which point is 1571 feet East of the present East bank of Independence Creek,
Thence South 00 degrees 00 minutes West, 500 feet,
Thence South 00 degrees 11 minutes West, 750.65 feet,
Thence South 14 degrees 37 minutes West, 749.35 feet,
Thence South 14 degrees 45 minutes West, 800.00 feet,
Thence South 14 degrees 55 minutes West, 1000.00 feet,
Thence South 15 degrees 14 minutes West, 1200.00 feet,
Thence South 15 degrees 02 minutes West, 1000.00 feet,
Thence South 14 degrees 48 minutes West, 795.00 feet,
Thence North 71 degrees 46 minutes East, 117.00 feet,
Thence North 48 degrees 20 minutes East, 100.00 feet,
Thence North 00 degrees 52 minutes West, 158.75 feet,
Thence North 53 degrees 36 minutes East, 259.90 feet,
Thence North 62 degrees 28 minutes East, 159.60 feet,
Thence North 85 degrees 16 minutes East, 326.10 feet,
Thence South 57 degrees 06 minutes East, 519.35 feet,

Thence South 63 degrees 26 minutes East, 268.0 feet,
Thence North 86 degrees 19 minutes East, 412.0 feet,
Thence South 57 degrees 46 minutes East, 536.0 feet,
Thence North 71 degrees 46 minutes East, 124.0 feet,
Thence North 12 degrees 34 minutes West, 328.1 feet,
Thence North 16 degrees 23 minutes East, 295.8 feet,
Thence North 40 degrees 17 minutes East, 238.8 feet,
Thence North 71 degrees 29 minutes East, 166.7 feet,
Thence South 48 degrees 13 minutes East, 201.2 feet,
Thence North 74 degrees 21 minutes East, 694.6 feet,
Thence North 41 degrees 51 minutes East, 125.0 feet,
Thence North 33 degrees 47 minutes East, 59.2 feet,
Thence North 57 degrees 55 minutes East, 193.9 feet,
Thence South 87 degrees 03 minutes East, 369.9 feet,
Thence North 75 degrees 39 minutes East, 285.5 feet,
Thence North 80 degrees 36 minutes East, 361.1 feet,
Thence South 82 degrees 23 minutes East, 304.0 feet,
Thence South 59 degrees 00 minutes East, 187.7 feet,
Thence South 34 degrees 54 minutes East, 173.1 feet,
Thence South 24 degrees 54 minutes East, 268.1 feet,
Thence South 05 degrees 46 minutes East, 77.8 feet,
Thence South 36 degrees 59 minutes West, 338.7 feet,
Thence South 61 degrees 16 minutes West, 252.4 feet,
Thence South 62 degrees 45 minutes West, 313.3 feet,
Thence South 17 degrees 30 minutes West, 296.5 feet,
Thence South 11 degrees 05 minutes West, 167.2 feet,
Thence South 01 degrees 48 minutes West, 460.6 feet,
Thence South 25 degrees 22 minutes East, 250.1 feet,
Thence South 73 degrees 38 minutes East, 277.4 feet,
Thence North 33 degrees 02 minutes East, 151.0 feet,
Thence South 75 degrees 13 minutes East, 329.5 feet,
Thence South 07 degrees 28 minutes East, 126.1 feet,
Thence South 25 degrees 02 minutes West, 244.5 feet,
Thence South 41 degrees 54 minutes West, 215.7 feet,
Thence South 80 degrees 24 minutes West, 251.4 feet,
Thence South 69 degrees 29 minutes West, 210.1 feet,
Thence South 62 degrees 14 minutes West, 495.0 feet,
Thence South 54 degrees 34 minutes West, 386.2 feet,
Thence South 12 degrees 54 minutes West, 443.1 feet,

Thence South 60 degrees 06 minutes East, 263.4 feet,
Thence South 02 degrees 56 minutes West, 283.3 feet,
Thence South 80 degrees 36 minutes West, 136.4 feet,
Thence South 64 degrees 04 minutes West, 192.8 feet,
Thence South 62 degrees 04 minutes West, 236.8 feet,
Thence South 57 degrees 44 minutes West, 342.2 feet,
Thence South 62 degrees 54 minutes West, 293.0 feet,
Thence South 73 degrees 24 minutes West, 230.3 feet,
Thence South 60 degrees 22 minutes West, 267.4 feet,
Thence South 49 degrees 36 minutes West, 344.1 feet,
Thence South 49 degrees 36 minutes West, 200.0 feet,
Thence South 49 degrees 36 minutes West, 71.4 feet

(Northeast corner of St. Benedict's),

Thence South 00 degrees 12 minutes West, 180.3 feet,
Thence South 44 degrees 46 minutes West, 162.4 feet,
Thence South 42 degrees 33 minutes West, 528.0 feet,
Thence South 35 degrees 10 minutes West, 621.7 feet,
Thence South 12 degrees 59 minutes West, 254.8 feet,
Thence South 13 degrees 20 minutes West, 240.2 feet,
Thence South 21 degrees 23 minutes West, 382.8 feet,
Thence South 18 degrees 05 minutes West, 343.9 feet,
Thence South 20 degrees 47 minutes West, 198.0 feet,
Thence South 13 degrees 18 minutes West, 264.0 feet,
Thence South 05 degrees 40 minutes West, 264.0 feet,
Thence South 13 degrees 00 minutes West, 326.0 feet,
Thence South 19 degrees 30 minutes West, 330 feet,
Thence South 26 degrees 44 minutes West, 208.6 feet,
Thence South 00 degrees 00 minutes West, 126.1 feet,
Thence South 00 degrees 00 minutes West, 495.0 feet,
Thence South 00 degrees 00 minutes West, 495.0 feet, to a point upon the right bank of the said Missouri River, at which latter point the said boundary returns upon the right bank of the said Missouri River to the present course or channel of the said Missouri River and running thence down the course or channel of the said Missouri River to the place therein opposite which the left bank of the said Missouri River is 2898 feet East and 2124 feet South of the center of section 26, Township 54 North, Range 37 West in Platte County, Missouri, thence departing upon and from the left bank of the present course or channel of the said

Missouri River, and running thence North to a point 1850 feet South and 258 feet East of the Southwest corner of Section 24, Township 54, Range 37, West of the 5th P. M. in Platte County, Missouri;

Thence East 481 feet;

Thence North 15 degrees 55 minutes East 1924 feet to the South line of the aforesaid Section 24;

Thence East to the North and South center line of Section 6, Township 7, South, Range 22 East in Atchison County, Kansas;

Thence North to a point 880 feet North of the center corner of said Kansas Section 6;

Thence East one mile to a point 880 feet North of the center line of Kansas Section 5, Township 7 South, Range 22 East, in Atchison County, Kansas;

Thence South 880 feet to the center of the aforesaid Kansas Section 5;

Thence East 645 feet to the top of a levee;

Thence South 17 degrees and 30 minutes East, along the top of said levee, 2772 feet;

Thence South 14 degrees East, 2740 feet;

Thence South 11 degrees and 30 minutes East 2721 feet to a point 130 feet East of the Southeast corner of Section 8, Township 7, Range 22 East of the 6th P. M. in Atchison County, Kansas;

Thence South 5 degrees and 10 minutes East, along the center of a slough, 2969 feet to the left bank of the Missouri River, the latter point being 1750 feet West of the Southeast corner, of the Southwest quarter of Fractional Section 32, Township 54, Range 36 West of 5th P. M., in Platte County, Missouri, at which latter point the said boundary returns upon the left bank of the said Missouri River to the present course or channel of the said Missouri River,

Thence down the course or channel of the said Missouri River to the place therein opposite which the left bank of the said Missouri River is 1878 feet West and 1172 feet North of the West quarter corner of Section Thirty-Five, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,

Thence departing upon and from the left bank of the present course or channel of the said Missouri River and running

Thence South 66 degrees 57 minutes East, 302 feet;
Thence North 46 degrees 03 minutes East, 297 feet;
Thence North 74 degrees 00 minutes East, 200 feet;
Thence South 71 degrees 57 minutes East, 300 feet;
Thence South 86 degrees 57 minutes East, 800 feet;
Thence North 77 degrees 03 minutes East, 2 feet to a point on the West line of Section Thirty-Five, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,
Thence North 77 degrees 03 minutes East, 628 feet;
Thence North 36 degrees 03 minutes East, 900 feet;
Thence North 51 degrees 03 minutes East, 900 feet;
Thence North 68 degrees 03 minutes East, 7 feet to a point on the north line of Section Thirty-Five, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,
Thence North 68 degrees 03 minutes East, 294 feet;
Thence North 78 degrees 18 minutes East, 592 feet;
Thence North 78 degrees 18 minutes East, 151 feet to a point on the north and south center section line of Section Twenty-Six, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,
Thence North 78 degrees 18 minutes East, 648 feet;
Thence North 84 degrees 20 minutes East, 688 feet;
Thence North 88 degrees 56 minutes East, 910 feet;
Thence North 65 degrees 29 minutes East, 150 feet to a point on the East line of Section Twenty-Six, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,
Thence North 65 degrees 29 minutes East, 212 feet;
Thence North 81 degrees 57 minutes East, 1054 feet;
Thence North 86 degrees 29 minutes East, 931 feet;
Thence South 87 degrees 12 minutes East, 230 feet;
Thence South 85 degrees 31 minutes East, 392 feet;
Thence South 84 degrees 29 minutes East, 1478 feet;
Thence South 89 degrees 09 minutes East, 628 feet;
Thence South 72 degrees 21 minutes East, 100 feet to Bear Creek;
Thence following the meander of said Bear Creek and running;
Thence South 32 degrees 03 minutes East, 231 feet to a point on the North line of Section Thirty-Six, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,
Thence South 32 degrees 03 minutes East, 669 feet to a point

n the East line of Section Thirty-Six, Township Seven South, Range Twenty-Two East in Leavenworth County, Kansas,
Thence South 39 degrees 08 minutes East, 231 feet;
Thence South 43 degrees 39 minutes East, 1096 feet;
Thence South 8 degrees 01 minute East, 306 feet to a point on the East and West center section line of Section Thirty-One, Township Seven South, Range Twenty-Three East in Leavenworth County, Kansas,
Thence South 08 degrees 01 minute East, 175 feet;
Thence South 43 degrees 56 minutes East, 299 feet;
Thence South 78 degrees 52 minutes East, 400 feet;
Thence South 62 degrees 00 minutes East, 329 feet;
Thence South 38 degrees 58 minutes East, 180 feet;
Thence South 68 degrees 02 minutes East, 930 feet to a point upon the left bank of the Missouri River where the said Bear Creek empties into the said Missouri River and which latter point is 1059 feet North and 406 feet East of the South quarter corner of Section Thirty-One, Township Seven South, Range Twenty-Three East in Leavenworth County, Kansas, at which latter point the said boundary returns upon the left bank of the said Missouri River to the present course or channel of the said Missouri River and running thence down the course or channel of the said Missouri River to the mouth of the Kansas River.

The State of Kansas, its officers, agents and representatives, its inhabitants, and all other persons, are perpetually enjoined from disputing or opposing the sovereignty, jurisdiction and dominion of the State of Missouri over the territory adjudged to said state by or in consequence of this decree; and the State of Missouri, its officers, agents and representatives, its inhabitants, and all other persons, are perpetually enjoined from disputing or opposing the sovereignty, jurisdiction and dominion of the State of Kansas over the territory adjudged to said state by or in consequence of this decree.

That insofar as the claims asserted by Complainant, the State of Kansas, in its Bill and particularly in paragraphs VI and VII thereof, with respect to the Forbes Bend area of the Missouri River, and the relief sought by said Complainant in and by said Bill are at variance with the terms of the foregoing decree, such claims and relief are denied and said Bill to this extent is dismissed.

Both States having requested postponement of entry of an order directing the placing of suitable monuments or markers on the above designated boundary until they have had opportunity to consider exchanging certain lands and to make such exchanges, jurisdiction of this cause is retained for the purpose of entering such order at an appropriate time.

The costs of this suit are equally divided between the two States, Complainant and Defendant, and this case is retained on the docket for further orders in fulfillment and enforcement of the provisions of this decree.

A true copy.

Test:

Clerk, Supreme Court, U. S.